

Significance of 1980 Kaypros **in the Evolution & Revolution of** **Portable Personal Computers [PPC]**

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**THANK YOU FOR THE OPPORTUNITY
TO PRESENT THIS TALK & PAPER**

**Allen Katz, Organizer Speaker
Program**

**Sol Libes, Editor for Papers for
the TCF CD of the Proceedings**

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ABSTRACT CORRECTION

Please note that there are **some errors** in the abstract printed and online of the TCF program with respect to this presentation. These errors are **corrected** in the Abstract on the TCF Digest CD.

This is **my fault** in submitting the original abstract and I apologize for any inconvenience it may have caused.

As far as I could determine, Osborne was **not** involved with Kaypro in making their computers. **Nor** was he was employed by Kaypro. He did leave the Osborne Computer Company [OCC] **before** it filed for bankruptcy.

However, in discovering these errors, it alerted me to be sensitive to any references about Osborne and Kaypro.

Indeed, there is a reference I found that Osborne was working on a deal with Kaypro to sell software through his book publishing efforts!

Very simply, there was a court case with a software developer over such types of sales and he had to stop this activity in general. This is further explained and referenced later in this paper.

Osborne's book on **hypergrowth** tells his side of the bankruptcy of the Osborne Computer Company.

It has many specific details involving the financial details on the bankruptcy. Much to ponder here!!!

The book does intimate that although they were intense competitors, Osborne had a high regard for Kaypro.

AUDIENCE ANALYSIS

SOME QUESTIONS FOR “YOU”

PLEASE SHOW HANDS –
HOW MANY PEOPLE –

NOW OWN A KAYPRO?

DID OWN A KAYPRO?

KNOW OF KAYPROS?

OSBORNE

COMPAQ OF 1980'S

INTRODUCTION

WHY I WROTE THIS PAPER

& GAVE THIS TALK

FOR 2008 TCF

SOME INITIAL POINTS –

[MORE SPECIFIC DETAILS DEVELOPED IN FULL PAPER]

SIMPLIFICATION – JUST 1980'S PPC'S

[PORTABLE, PERSONAL COMPUTERS]

COMPATIBILITY – DIVERSE AUDIENCES

MOUNTAINTOPS – MAIN POINTS

PERSPECTIVE & CONTEXT – 1980'S

“YOUR” CHALLENGE – WHAT WILL “YOU”

SAY – 25 YEARS FROM NOW OR 3 – 5 YEARS!

ATTRACTION OF COMPUTERS

**THIS IS ALL PART OF MY DECADES
LONG SCIENCE, TECHNOLOGY &
SOCIETY [STS] RESEARCH IN MANY
AREAS – THIS IS JUST ONE OF
THESE TOPICS**

SPECIFIC PERSPECTIVE / CONTEXT

1982, TIME MAGAZINE DECLARED
“**THE COMPUTER**” THEIR “MAN OF THE
YEAR FOR 1981”!

IN FEBRUARY 1982, **STEVE JOBS**,
CHAIRMAN OF APPLE SINCE 1981,
APPEARS ON THE COVER OF TIME
MAGAZINE

EARLY 1980 COMPUTER OPTIONS

Mainframes

Desktops for offices

“Kits” to build your own for hobbyists

A wide variety of very diverse systems

- all **trying to be “real”** computers as we know them today

Special cases – initial Apple, IBM & Radio

Shack systems – **NOT REALLY PPC’S**

FIRST PERSONAL COMPUTER [PC]

ORIGINAL IBM PC {"PERSONAL COMPUTER"}
MODEL 5150 OF 1981

ACTUALLY A DESKTOP & NOT PORTABLE,

HOWEVER IT REVOLUTIONIZED
COMPUTING AND SET MANY OF THE
STANDARDS FOR PPC'S.

Enter the “Portable” Personal Computer [PPC] In the Early 1980’s

THESE WERE NOT LAPTOP COMPUTERS!

THEY WERE **VERY LARGE** – SUITCASE SIZE &
VERY HEAVY [20 – 30 POUNDS], HARDLY
SOMETHING YOU WOULD PUT ON YOUR LAP
TO USE.

OTHER DESCRIPTIVE TERMS THAT WERE USED WERE –

“TRANSPORTABLE & LUGGABLE.”

A NICKNAME FOR THE COMPAQ WAS “THE SEWING MACHINE” OR OVERSIZED “LUNCHBOX!”

SINCE IT WAS VERY SIMILAR TO PORTABLE SEWING MACHINES & LUNCHBOXES AT THE TIME.

SELF CONTAINED “COMPLEAT” [KAYPRO’S TERM] / COMPLETE SYSTEMS

**ABLE TO DO ALMOST ALL SMALL BUSINESS
& HOME USERS WOULD WANT TO DO.**

**A NEW REVELATION FOR PAST COMPUTER
USERS.**

**PREVIOUSLY NO REALISTIC “COMPLEAT /
COMPLETE” COMPUTER SYSTEMS FOR
EVERYDAY USERS.**

**INCREDIBLE INSIGHT & GENIUS INTO
HUMAN NEEDS & WANTS**

BY ADAM OSBORNE

**TO DESIGN & PRODUCE FIRST TRUE
“PORTABLE” COMPUTER**

VERY SIGNIFICANT ACHIEVEMENT

WHY DID OTHERS NOT SEE THIS EARLIER?

PORTABLE – NOT LAPTOPS, BUT SUITCASE
LIKE - REALISTICALLY & RELATIVELY EASILY
TAKEN ON THE ROAD & USED AT WIDE
VARIETY OF LOCATIONS, NOT JUST IN
OFFICE OR AT HOME – **DESIGNED TO FIT
UNDER AIRPLANE SEATS!**

PERSONAL – GENERALLY **AFFORDABLE** FOR
SMALL BUSINESS & HOME USERS.

TRUE **C**OMPUTERS

NOT JUST CALCULATORS

COULD DO MOST BASIC COMMON COMPUTER TASKS –

**WORD PROCESSING,
SPREADSHEETS,
DATABASE MANAGEMENT,
COMPUTER PROGRAMMING,
NETWORKING THRU A MODEM**

SELF CONTAINED – INCLUDED

**MONITOR,
KEYBOARD,
STORAGE DEVICE – DISK DRIVE,
SOFTWARE, ETC.**

TRULY “COMPLETELY COMPLETE” SYSTEMS

READY TO USE “RIGHT OUT OF THE BOX!”

**A SURPRISING “TOTAL NEW DEVELOPMENT”
FOR COMPUTING COMMUNITY**

**QUICKLY EMBRACED ENTHUSIASTICALLY
DESPITE THEIR MANY “GROWING PAINS!”**

“SPECIAL EXCITEMENT IN THE AIR”

MANY BECAME DEVOTED TO THEM.

**FORMAL LOCAL USER'S GROUPS / CLUBS
DEVELOPED FOR EACH COMPUTER BY
EACH COMPANY TO SHARE INFORMATION,
USES, REPAIR / MAINTENANCE, ETC.**

**THIS HELPED COMPANIES MANAGE
CUSTOMER SUPPORT**

**ALL SO NEW, LOT OF QUESTIONS, ETC
BY MANY**

**I STARTED ONE IN THE QUAKERTOWN,
PA AREA & QUICKLY HAD OVER
50 MEMBERS – KAYPRO WAS VERY
SUPPORTIVE & PROVIDED A LOT OF
PRACTICAL & USEFUL INFORMATION**

OUR LOCAL COMPUTER GROUP –

**LEHIGH VALLEY COMPUTER GROUP
[WWW.LVCG.ORG] ALSO QUICKLY HAD
A VERY ACTIVE KAYPRO USERS GROUP
THAT SUDDENLY & DRAMATICALLY
SURPRISED THEIR TRS-80 FOUNDERS!**

3 FIRST “PPC” PLAYERS

OSBORNE, KAYPRO & COMPAQ

“THE CAST OF CHARACTERS”

TO PLAY THEIR PARTS

ON THE “PPC” STAGE

OSBORNE 1 - FIRST “PPC” IN 1981

INITIALLY BUILT IN EAST COAST NJ PLANT

NEW COMPANY FOUNDED BY ADAM OSBORNE

**WELL KNOWN TECHNICAL WRITER OF
VERY UNDERSTANDABLE COMPUTER BOOKS**

**SAW THE NEED AHEAD OF MANY OTHERS
& PRODUCED A COMPUTER TO ADMIRABLY
FILL THIS NEED.**

KAYPRO II - SECOND IN 1982

BUILT IN WEST COAST PLANT IN CA

**BY A LONG ESTABLISHED INTERNATIONAL
ELECTRONIC MANUFACTURING
COMPANY - **NON-LINEAR SYSTEMS****

FOUNDED BY **ANDY KAY [**NOT ALAN KAY**].**

COMPAQ PORTABLE - THIRD IN 1983

BUILT IN TEXAS PLANT

**NEW COMPANY FOUNDED BY ROD CANION,
JIM HARRIS & BILL MURTO**

**FORMER SENIOR TEXAS INSTRUMENTS
MANAGERS**

**INVESTED \$1000 [\$2400 IN TODAY'S
DOLLARS] TO FORM COMPAQ**

NAME DERIVED FROM -
COMPATIBLE AND QUALITY
COMPAQ

MY THOUGHTS –

COMPAQ WAS COMPACTI
{A COMPACTI COMPUTER}

[BUT FOUND NO REFERENCE
TO SUCH A WORD CONNECTION]

**NOTE - IBM DID NOT COME OUT WITH A
“REAL PPC” UNTIL 1984**

**CALLED SOME EARLIER COMPUTERS
“PORTABLE” {?} TO DISTINGUISH THEM
FROM LARGE STATIONARY MAINFRAMES**

**THESE “PORTABLES” {?} WERE REALLY
MORE LIKE DESKTOPS – BIG / HEAVY
– NOT EASILY MOVED**

THEY WERE ALSO VERY EXPENSIVE!

**OSBORNE & KAYPRO WERE CP/M
OPERATING SYSTEMS**

**COMPAQ WAS IBM COMPATIBLE USING
MS-DOS BY MICROSOFT, LIKE IBM**

**BUT THEIR OWN BIOS, NOT IBM'S BIOS,
SO THERE WOULD BE NO PATENT
INFRINGEMENTS.**

EXCELLENT ARTICLE BY “SOL LIBES**” OF
TCF ON THE DEVELOPER OF THE VERY
POWERFUL, SUCCESSFUL & POPULAR
CP/ M OPERATING SYSTEM**

**SHOULD BE CONSULTED BY THOSE WHO
ARE NOT FAMILIAR WITH IT.**

**HELPS TO BETTER APPRECIATE MUCH OF
THIS TALK & PAPER**

**ALSO WHY BOTH OSBORNE & KAYPRO
STUCK WITH CP / M TOO LONG!**

SPECIFICS - SPECIFICATIONS

COMPARISONS – CONTRASTS

SYSTEMS

“HARDWARE - COMPUTERS”

“SOFTWARE – BUNDLES”

ALL THREE PPC'S SHARED SAME **GENERAL HARDWARE** **CHARACTERISTICS -**

STURDY LARGE CASE – SUITCASE STYLE
HEAVY – 20 – 30 POUNDS
MONITOR
KEYBOARD
DISK DRIVES FOR STORAGE
POWER SUPPLY
MAINBOARD – “MOTHERBOARD”

**ALL COULD BE JUST EASILY
PICKED UP & TAKEN ALMOST
ANYWHERE**

**TO BE USED IF AN ELECTRICAL
OUTLET WAS AVAILABLE**

**BUT OSBORNE EVEN OFFERED
AN OPTIONAL BATTERY PACK!**

SOFTWARE

OSBORNE & KAYPRO PROVIDED WHOLE SUITE COMMON PROGRAMS –

**WORD PROCESSING, SPELL CHECK,
DATABASE, SPREADSHEET,
PROGRAMMING IN BASIC, COMMUNICATION,
ETC.**

COMPAQ DID NOT

IT WAS IBM COMPATIBLE, SO LOT OF SOFTWARE ALREADY AVAILABLE

BUT DID PROVIDE LOTUS SYMPHONY - SPREADSHEET, WORD PROCESSOR & COMMUNICATION – BUT **NOT** BIG SUCCESS!

BESIDES JUST USUAL OPERATING MANUALS

**WHAT THEY DID “NOT” HAVE THAT WE
TAKE FOR GRANTED TODAY –**

**MOUSE – ONLY KEYBOARD TO
COMMUNICATE WITH IT**

**CD / DVD DRIVE – ONLY 2 DISK DRIVES
OF 191K OR 320K CAPACITY**

**HARD DRIVE – SO NO PRELOADED
OPERATING SYSTEM & SOFTWARE**

**NO VIRUSES! [YET! – APPLE
DISCOVERED 3 VIRUSES IN 1981
THAT CAME WITH SOME GAMES
THAT WERE INCLUDED IN THEIR
OFFERING]**

**FEW REMOTE BULLETIN BOARDS TO CONTACT
BY MODEM [EXTERNAL ACOUSTIC COUPLER] –
ONLY ABOUT 200 IN EARLY 1980'S**

**NO REAL GRAPHICS OR COLOR – BUT
COMPAQ DID HAVE SOME GRAPHICS**

NO WINDOWS – ONLY “TEXT ON SCREEN”

**YOU HAD TO MEMORIZE SOFTWARE
COMMANDS OR USE COMMAND LISTS –**

**NO PULL DOWN MENUS LIKE IN WINDOWS
FOR COMMANDS**

THE PRICE OF THE **OSBORNE** & **KAYPRO**
WERE INITIALLY THE SAME

[\$1795, \$4235 IN TODAY'S DOLLARS] –

THAT WAS **INTENTIONAL** BY KAYPRO,
THEIR MAJOR COMPETITOR

COMPAQ WAS SIGNIFICANTLY HIGHER
IN PRICE **[\$3,590, \$7678 IN TODAY'S
DOLLARS OR 100% MORE]**,

BUT **IBM COMPATIBLE** – ALMOST
100%, BUT **NOT** TOTALLY SOME FOUND.

DIFFERENCES -

**KAYPRO HAD ALUMINUM METAL CASE –
MORE RUGGED & MINIMIZED INTERFERENCE
WITH OTHER ELECTRICAL DEVICES [FCC
CONCERNS – E.G., RADIO SHACK HAD TO
EVENTUALLY RECALL ALL TRS-80'S]**

**BUT EXPOSED COOLING VENT HOLES IN
METAL CASE COULD LET THINGS FROM
ENVIRONMENT INTO IT [E.G., RAIN, SNOW,
DUST, DIRT, BUGS, ETC.].**

KAYPRO ALSO HAD KEYBOARD, SERIAL & PARALLEL PORTS EXPOSED ON THE BACK OF CASE.

BUT SEVERAL VINYL AND NYLON OUTER COVERS AVAILABLE FOR SOME PROTECTION

OSBORNE HAD A VERY SMALL 5" DIAGONAL SCREEN AS OPPOSED TO THE LARGER 9" SCREEN.

BUT MACINTOSH HAS A 9" SCREEN! SO THIS SIZE IS ACCEPTABLE EVEN TODAY!

OSBORNE ALSO DID **NOT HAVE A
DETACHABLE KEYBOARD, BUT
OTHER 2 DID.**

**COMPAQ MADE IT MORE DIFFICULT
TO LOSE THE COILED KEYBOARD
CONNECTING CABLE BY MAKING IT
RETRACTABLE.**

**MISPLACING OF THIS CABLE A
USUAL OCCURRENCE FOR MANY
KAYPRO OWNERS!**

**KAYPRO & OSBORNE HAD EXTENSIVE
“BUNDLED” SOFTWARE – EQUAL TO
PRICE OF TOTAL SYSTEM**

COMPAQ DID NOT

HOW COULD THEY DO THIS?

**OSBORNE INDICATED THEY GAVE STOCK
TO THE SOFTWARE COMPANIES & VERY
SMALL FEE PER COMPUTER FOR USING
THEIR SOFTWARE**

**OF COURSE, SOFTWARE COMPANIES
GOT TREMENDOUS PR FROM SUCH
“BUNDLED PACKAGES” FOR OTHER
SALES TO CUSTOMERS WHO DID NOT
BUY THESE COMPUTERS**

	A	B	C	D	E
1	COMPARE & CONTRAST SPECIFICATIONS PPC "TRINITY"				
2		F. GADEK		03/012008	IBM
3					PORTABLE
4				COMPAQ	PC5155
5	SPEC	OSBORNE 1	KAYPRO II	PORTABLE	MODEL 68
6	DATE	1981	1982	1983	1984
7	OS	CP/M	CP/M	IBM COMPAT	IBM PC-DOS
8	CPU	Z80	Z80	INTEL 8088	INTEL8088
9	SPEED MHZ	4	2.5	4.77	4.77
10	RAM K	64	64	128	256
11	SCREEN DIA "	5	9	9	9
12	DISK DRIVES				
13	#	2	2	2	2
14	CAP K	100	191	360	360
15	DETACHABLE				
16	KEYBOARD	NO	YES	YES	YES
17	CASE	PLASTIC	METAL	PLASTIC	PLASTIC
18	WEATHER				
19	EXPOSURE	NO	YES	NO	NO
20	NEW COMPANY	YES	NO	YES	NO
21	INCLUDE				
22	EXTENSIVE				
23	SOFTWARE	YES	YES	NO	NO
24	PRICE	\$1,795	\$1,795	\$3,590	\$4,225
25		\$1,295	\$1,595		
26		\$995			
27	NOTE -	OPTIONS NOT INCLUDED			
28		SOME CHANGES IN LATER VERSIONS			
29	REFERENCES -				
30		WWW.OLDCOMPUTERS.NET			
31		WWW.WIKIPEDIA.ORG			
32		WWW.OLDCOMPUTERS.COM			
33		[NOTE - COM NOT NET]			
34		WWW.RLFOX.COM			
35					

SALES / LOSS

ULTIMATE SUCCESS / FAILURE

SMALL OR PC COMPUTER INDUSTRY
LIKE MANY SIMILAR BUSINESSES

VERY FAST MOVING & HIGHLY COMPETITIVE

LIKE RELAY RACE –

PARTICIPANTS KEEP HANDING OFF TO
THEIR NEXT TEAM MATE **EVER MORE
IMPROVED COMPUTER MODELS**

NO FINISH LINE

SO NOBODY FINISHES

ONLY JUST DROP OUT

NEW ONES CONTINUALLY ENTER

SOME EARLIER AND SOME LATER

NOT FOR THE “FAINT HEARTED!”

**TAKES A VERY SPECIAL COMPANY &
VERY SPECIAL PEOPLE TO EVEN BE
SIGNIFICANT PLAYER**

**VERY SIMILAR TO THOSE WHO GO
INTO THE SMALL FARM TYPE WINERIES
SO POPULAR TODAY [AN AREA OF MY
PARTICULAR EXPERIENCE & EXPERTISE]**

HOW TO MEASURE SUCCESS?

**CAN BE BASED ON MANY
FACTORS – LONGEVITY,
QUALITY, PROFITABILITY,
HIGH IDEALS, PERSONALITIES,
FILLING CONSUMER NEEDS /
WANTS / DESIRES, UNIQUE
PRODUCTS, ETC.**

BUT -

**OSBORNE ONLY LASTED ABOUT
3 YEARS BEFORE BANKRUPTCY FILING**

**KAYPRO LASTED ABOUT 7 YEARS BEFORE
FILING BANKRUPTCY**

**COMPAQ CONTINUED VERY SUCCESSFULLY
FOR MANY YEARS - RECENTLY BECAME
PART OF HP AFTER VERY CONTROVERSIAL
& CONTENTIOUS “COURTING PHASE
& EVENTUAL MARRIAGE CEREMONY!”**

FINANCING WAS MADE POSSIBLE BY
RELATIVELY NEW RISING PHENOMENON
AT THAT TIME –

VENTURE CAPITALISTS

1983 WAS A “BOOM YEAR”

HOW FORTUITOUS FOR THE PPC INDUSTRY.

MUCH DEPENDED ON LONG TERM
“GOOD RESULTS” BY THE PPC INDUSTRY

KEEPING INVESTORS HAPPY WITH
CONTINUAL FLOW OF GOOD NEWS / PR
ESSENTIAL TO MAINTAIN CONFIDENCE

SOME SETBACKS WERE EXPECTED &
UNDERSTOOD

CONSUMERS ALSO TARGETS OF SUCH
GOOD NEWS TO KEEP THEM BUYING

OVERALL, ALL 3 COMPANIES DID SOME FINE WORK & VERY SENSITIVE TO NEEDS OF INVESTORS & CUSTOMERS

BUT AS IN MOST HUMAN ENDEAVORS, SOME “SLIPPAGE**” ACCUMULATED & BECAME **DECISIVE FACTORS** IN ULTIMATE SUCCESS OR FAILURE OF PRODUCTS & COMPANIES.**

**STRONG & CHARISMATIC, BUT FALLIBLE,
PERSONALITIES WERE ESSENTIAL IN MANY
OF THESE ENDEAVORS.**

**DO YOU REALLY BELIEVE IN “THE PERSON”
BEHIND THE COMPANY?**

**SO PUBLIC RELATIONS BECAME AN EVER
MORE IMPORTANT FACTOR IN THE SUCCESS
OR FAILURE OF A PRODUCT & COMPANY.**

**VERY CONTROVERSIAL “OSBORNE EFFECT,”
“OSBORNE MYTH,” & “OSBORNEING”
DRAMATICALLY SHOWED HOW POWERFUL
MEDIA HAD BECOME TO CORPORATIONS
& HOW VERY CAREFULLY IT MUST BE
CULTIVATED, MANIPULATED, “FED,” &
MANAGED, LIKE ANY OTHER ASPECT OF
BUSINESS.**

**INFORMATION HAS TO BE STRICTLY
CONTROLLED**

SECRECY HAS TO BE MAINTAINED.

IT DOES NOT HAVE TO BE TRUE

**EVEN IF THE FACTS CLEARLY PROVE
OTHERWISE**

PEOPLE HAVE TO BELIEVE IT

EVEN IF THE FACTS ARE QUESTIONABLE

**“SNAPSHOT” OF THE BEST COMPUTER
SELLERS BY CATEGORY FROM OCTOBER
1985 TO NOVEMBER 1986 [**14 MONTHS**]**

**THE HEIGHT OF THE FRANTIC COMPETITION
IN THE COMPUTER INDUSTRY ESPECIALLY
FOR **PPC'S**.**

****OSBORNE** WAS ALREADY OUT OF BUSINESS**

**IBM AND APPLE WERE DOMINANT
AVERAGE 58%**

KAYPRO'S AVERAGE ABOUT 6%

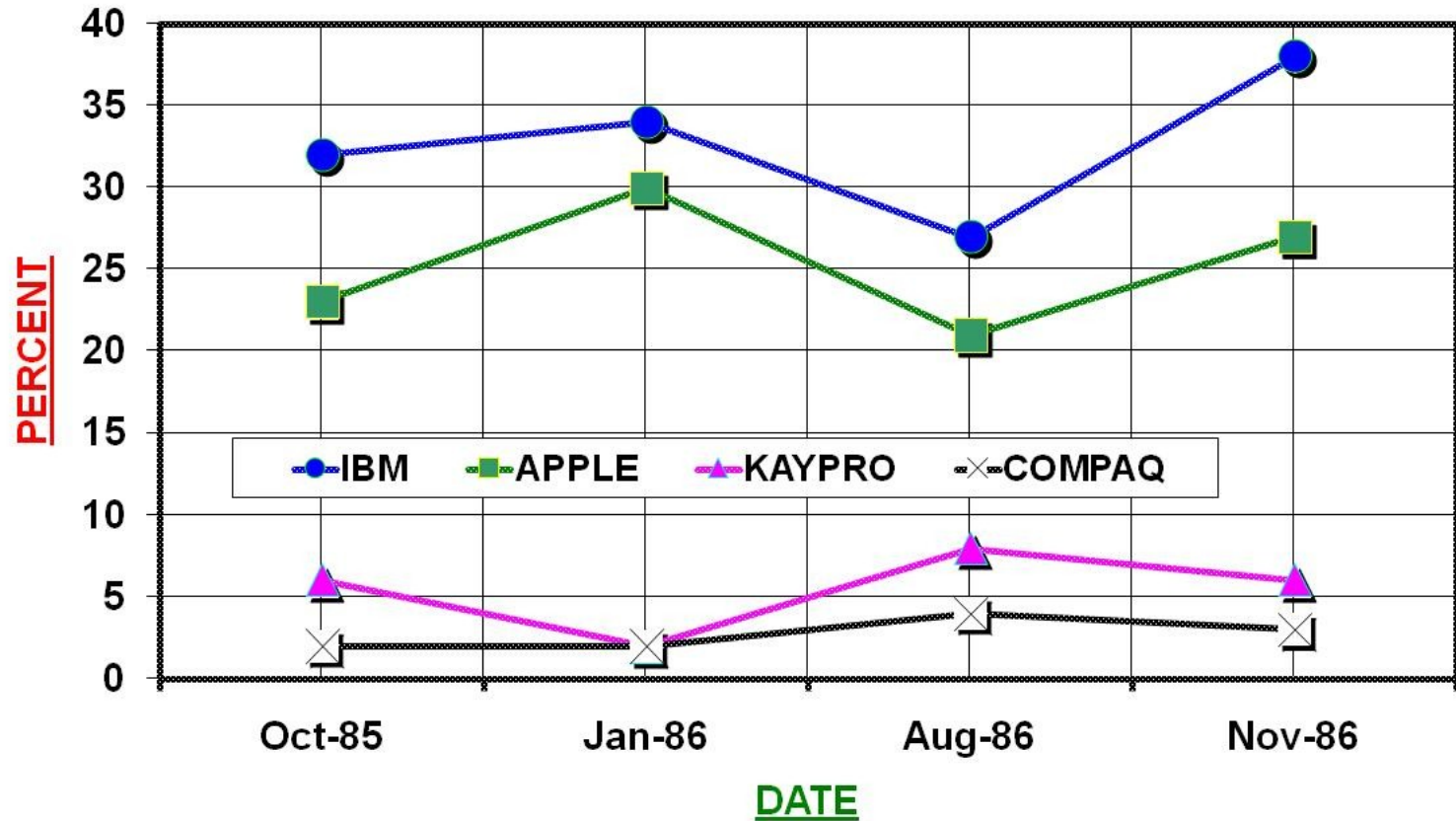
COMPAQ'S AVERAGE ONLY 3%

THE REST, ON AVERAGE OF ABOUT 27%,

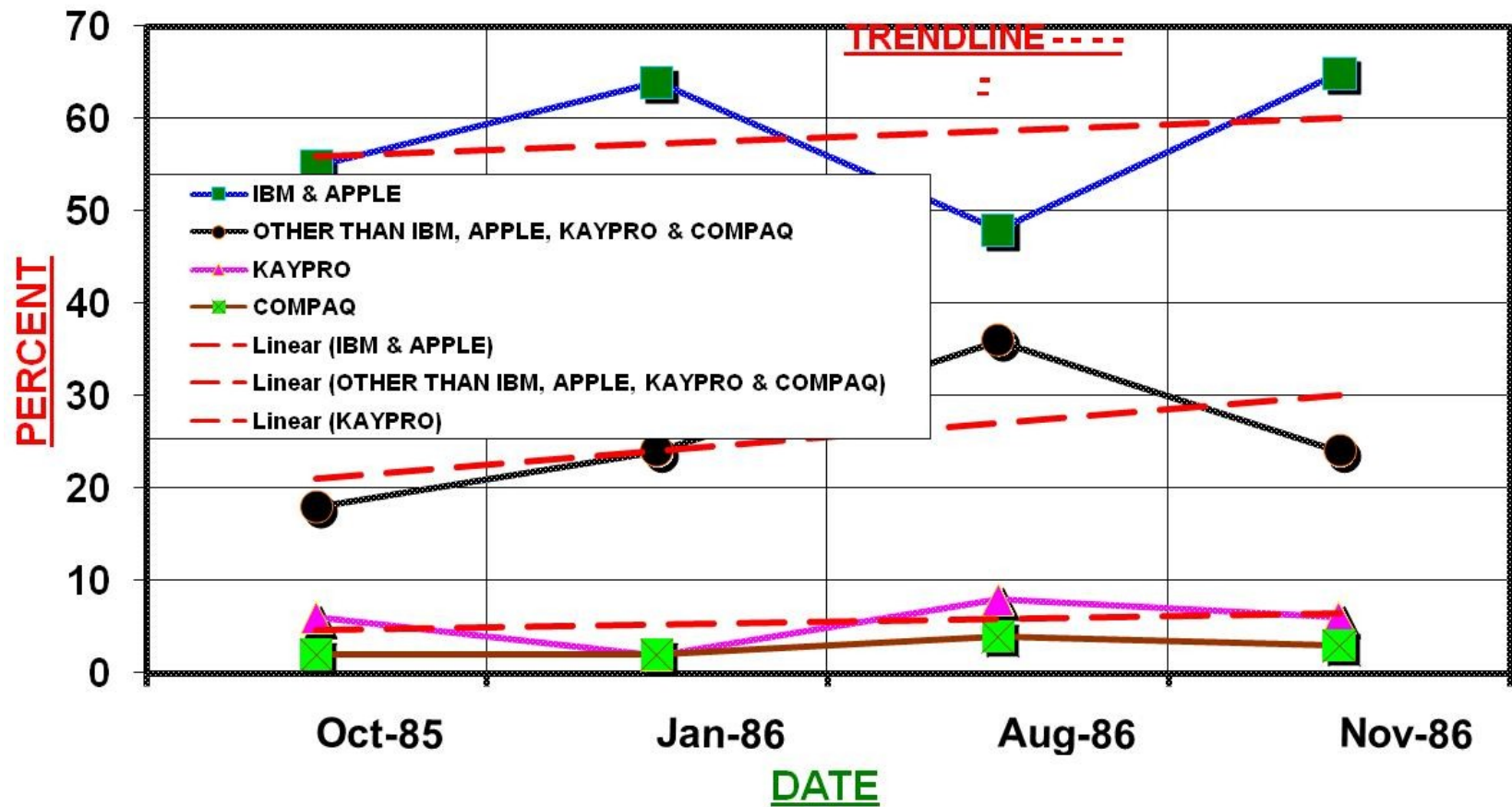
**INVOLVED A LOT OF OTHER SMALL,
RELATIVELY UNKNOWN COMPUTER
COMPANIES FIGHTING FOR MARKET SHARE
& SURVIVAL.**

**SO THE COMPUTER INDUSTRY WAS STILL
IN GREAT STATE OF FLUX FOR WHO WOULD
STAY IN THE “RELAY RACE,” & ON WHAT
BASIS.**

BEST COMPUTER SELLERS



BEST COMPUTER SELLERS BY CATEGORY



WHY SUCCESS OR FAILURE?

**MANY COMPLEX FACTORS, AS IN MOST
HUMAN ENDEAVORS**

**THIS TALK CAN ONLY CITE SOME MAJOR
ASPECTS**

**MY PAPER GOES INTO MANY MORE
SPECIFICS**

MY INTERPRETATION OF DATA

MY CONCLUSIONS

DO YOUR OWN RESEARCH

**YOU MAY COME UP WITH DIFFERENT
CONCLUSIONS**

SOME “POSITIVES”

ALL 3 COMPANIES -

**HIGHLY QUALIFIED & EXPERIENCED
PEOPLE**

**VERY GOOD & INNOVATIVE
PRODUCTS**

INITIAL FANTASTIC SUCCESS

TRIED VERY HARD!

**LITTLE IF ANY REALLY INTENTIONAL
“BAD DECISIONS” BY PEOPLE ACTING
“IRRATIONALLY”**

**BUT MANY OTHER COMPUTER COMPANIES
DID MAKE INTENTIONAL BAD DECISIONS &
ACTED IRRATIONALLY - AS NOTED IN MANY
BOOKS**

**ONE IN PARTICULAR –
“ACCIDENTAL EMPIRES”
BY ROBERT CRINGELY**

{“RAMPANT INSANITY RAGING???”}

FOR OSBORNE & KAYPRO –

**MANY DECISIONS, IF NOT ALMOST ALL,
MADE BASED ON BEST DATA AVAILABLE
AT THE TIME & WERE BELIEVED TO BE
CORRECT AT THAT TIME UNDER THOSE
SPECIFIC CONDITIONS**

BUT A NEW INDUSTRIAL ERA

NEW PRODUCT

NEW MANUFACTURING PROCESS

NEW MANAGEMENT REQUIRED

CRITICAL DECISIONS HAD TO BE
MADE **VERY FAST**

LITTLE ROOM FOR ERROR

OSBORNE'S **"HYPERGROWTH"**

THEY WERE IN “UNCHARTED WATERS”

THERE WERE NO PREVIOUS “CASE STUDIES”
TO GO TO FOR GUIDANCE

NOBODY HAD EXPERIENCED SUCH
“HYPERGROWTH” IN SUCH FAST MOVING
COMPLEX TECHNICAL AREAS PREVIOUSLY.

**BUT THEY DID NOT GO DOWN EASILY OR
WILLINGLY!**

**MANY DECISIVE, CREATIVE AND
EXTRAORDINARY ACTIONS WERE TAKEN
TO TRY TO TURN THE TIDE, IN THE
MOST PURE & IDEALISTIC MOTIVATIONS
IN MANY CASES.**

SOME WORKED AND SOME DID NOT.

**OVERALL, IN THE LONG RUN, IT JUST
WAS NOT TO BE.**

**THE DECK WAS TOO STACKED
AGAINST THEM IN TOO MANY WAYS.**

HOWEVER, THERE ARE TIMES
“TO CONTINUE TO FISH & THERE
ARE TIMES TO JUST CUT BAIT &
MOVE ON.”

OVERALL, MANY INVOLVED FINALLY
REALIZED THIS & MOVED ON WITH
THEIR LIVES, MANY BEING VERY
SUCCESSFUL IN OTHER AREAS OF
LIFE AND BUSINESS.

MY DECADES OF STS RESEARCH INDICATES THIS IS A PATTERN IN MANY INDUSTRIES, ESPECIALLY THOSE INVOLVED WITH HIGHLY SCIENCE & TECHNOLOGICALLY INTENSIVE COMPANIES.

MANY REASONS ARE INVOLVED & MANY REASONS ARE VERY SPECIFIC TO A PARTICULAR INDUSTRY & ONLY RECOGNIZED MANY YEARS AFTER THE FACT. SOME MAY NEVER BE RECOGNIZED.

**SOME THINGS ARE UNDER YOUR CONTROL,
BUT MANY ARE NOT.**

SOME ARE JUST NOT KNOWN AT THAT TIME

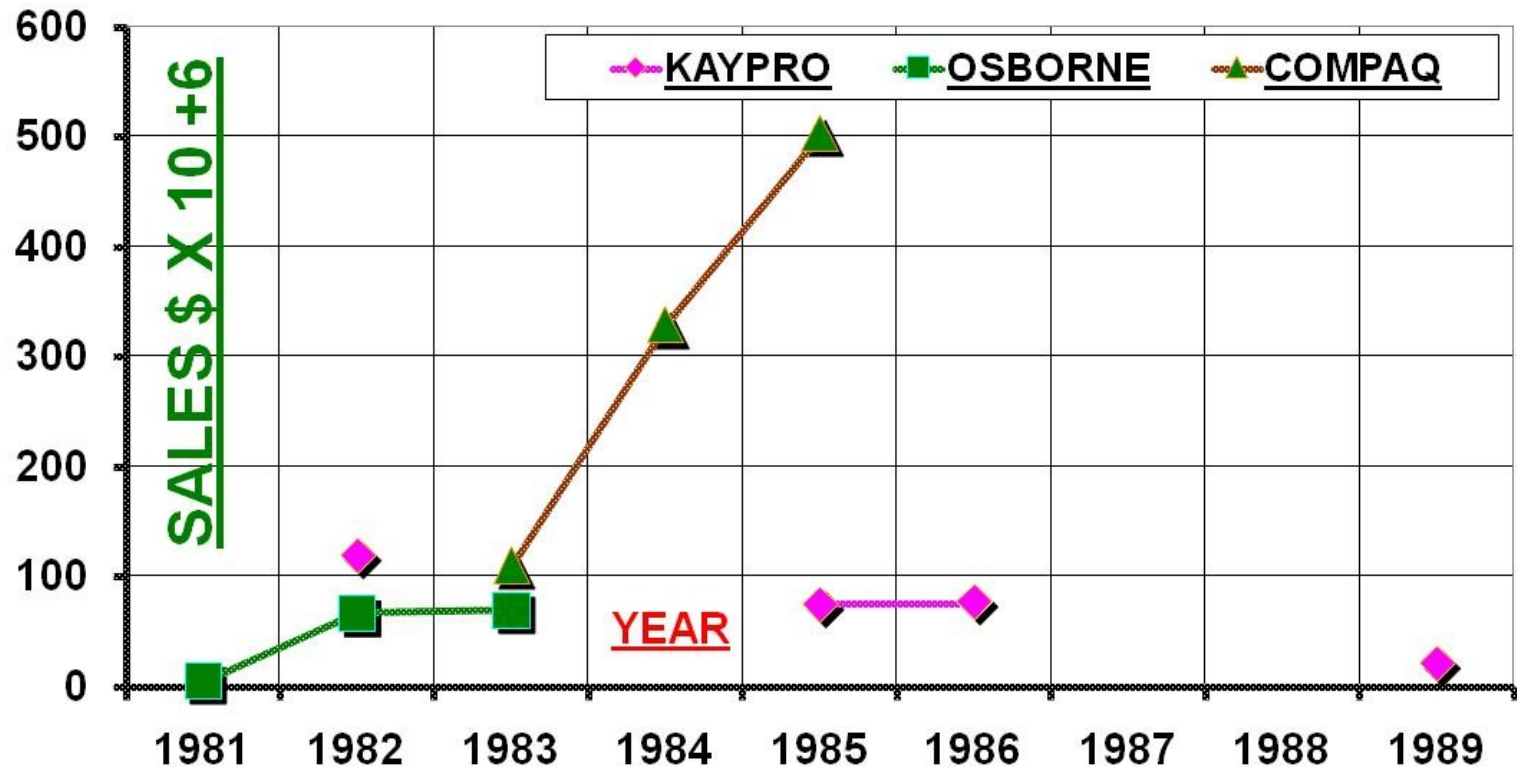
**SOME ARE JUST A MATTER OF JUDICIOUS
TIMING & JUST PLAIN LUCK**

**“BEING AT THE RIGHT PLACE AT THE
RIGHT TIME”**

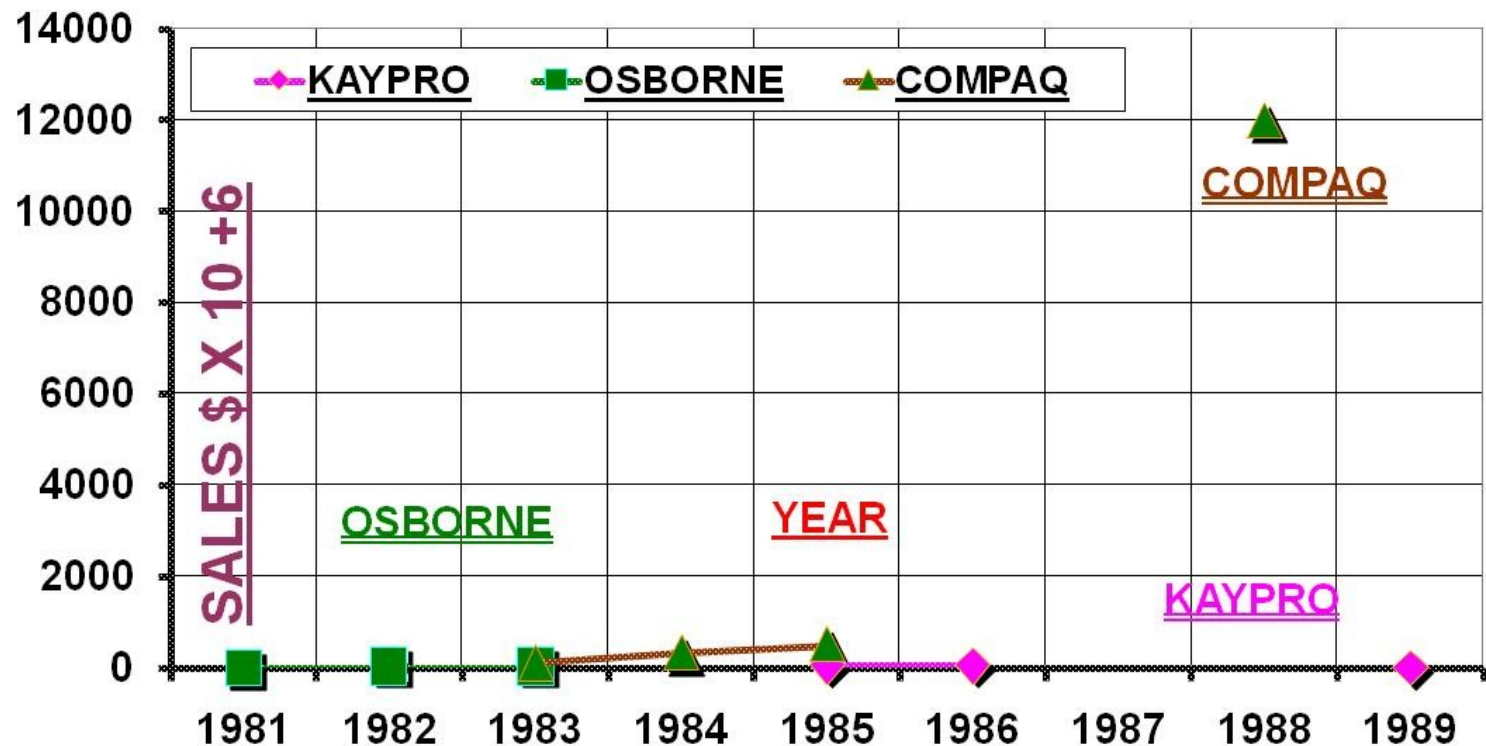
**“CHANCE FAVORS THE PREPARED MIND!”
[PASTEUR]**

**SOME DATA
TO LOOK AT
& INTERPRET**

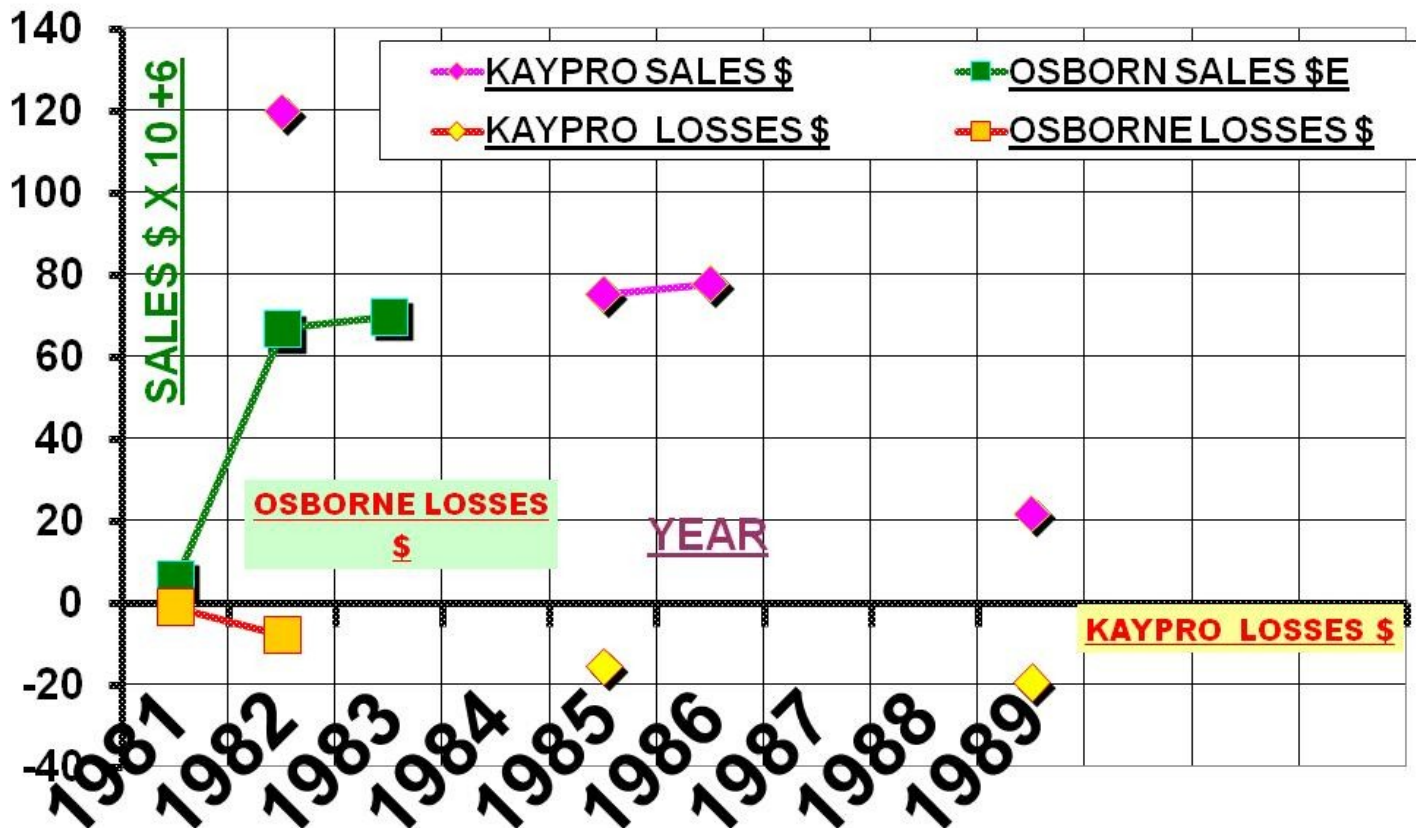
SALES 3 MAIN PPC COMPANIES 1980'S
[BUT NOT COMPAQ 1988 \$12 BILLION]



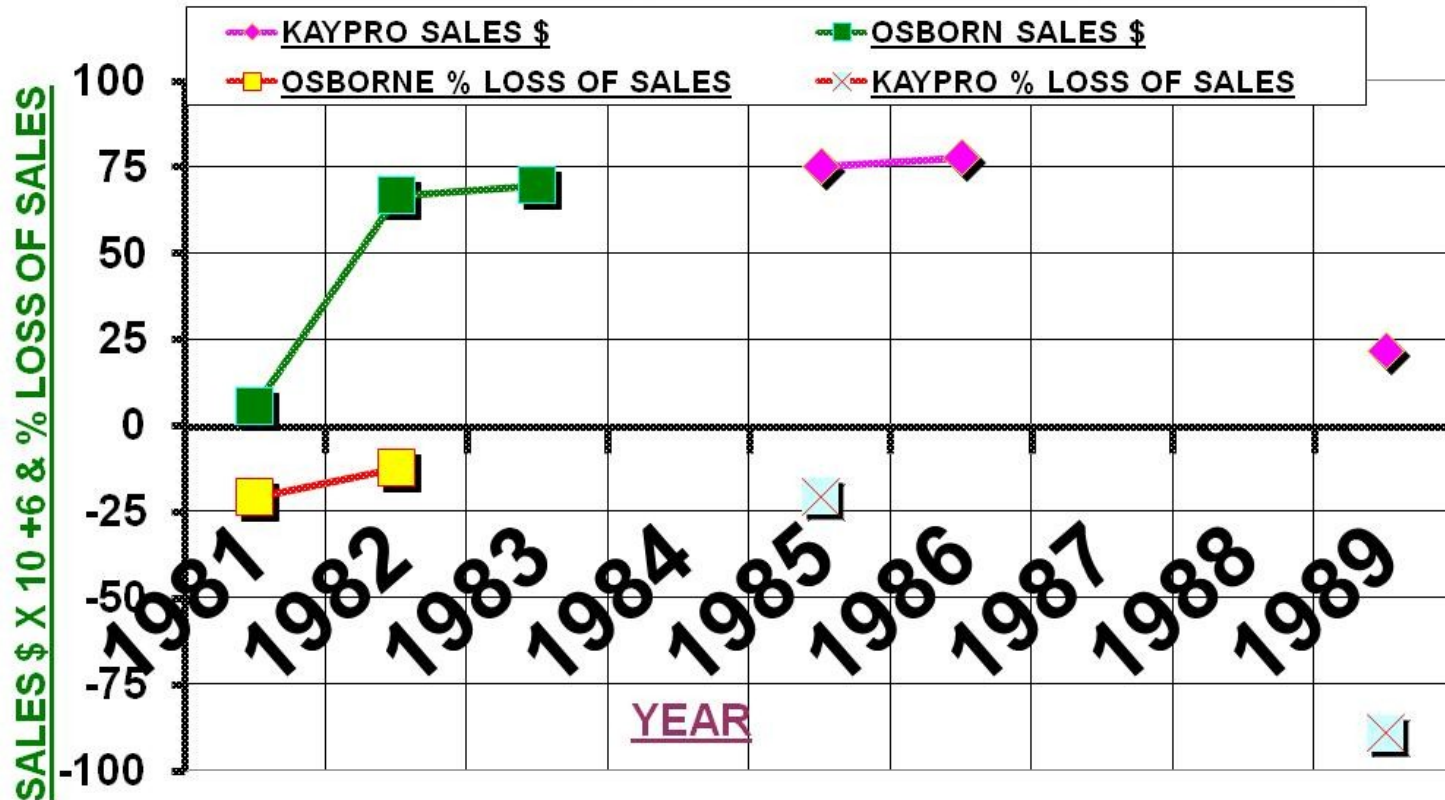
SALES 3 MAIN PPC COMPANIES 1980'S [INCLUDES 1988 COMPAQ \$12 BILLION]



SALES & LOSSES ONLY OSBORNE & KAYPRO PPC COMPANIES 1980'S [COMPAQ HAD NO LOSSES]

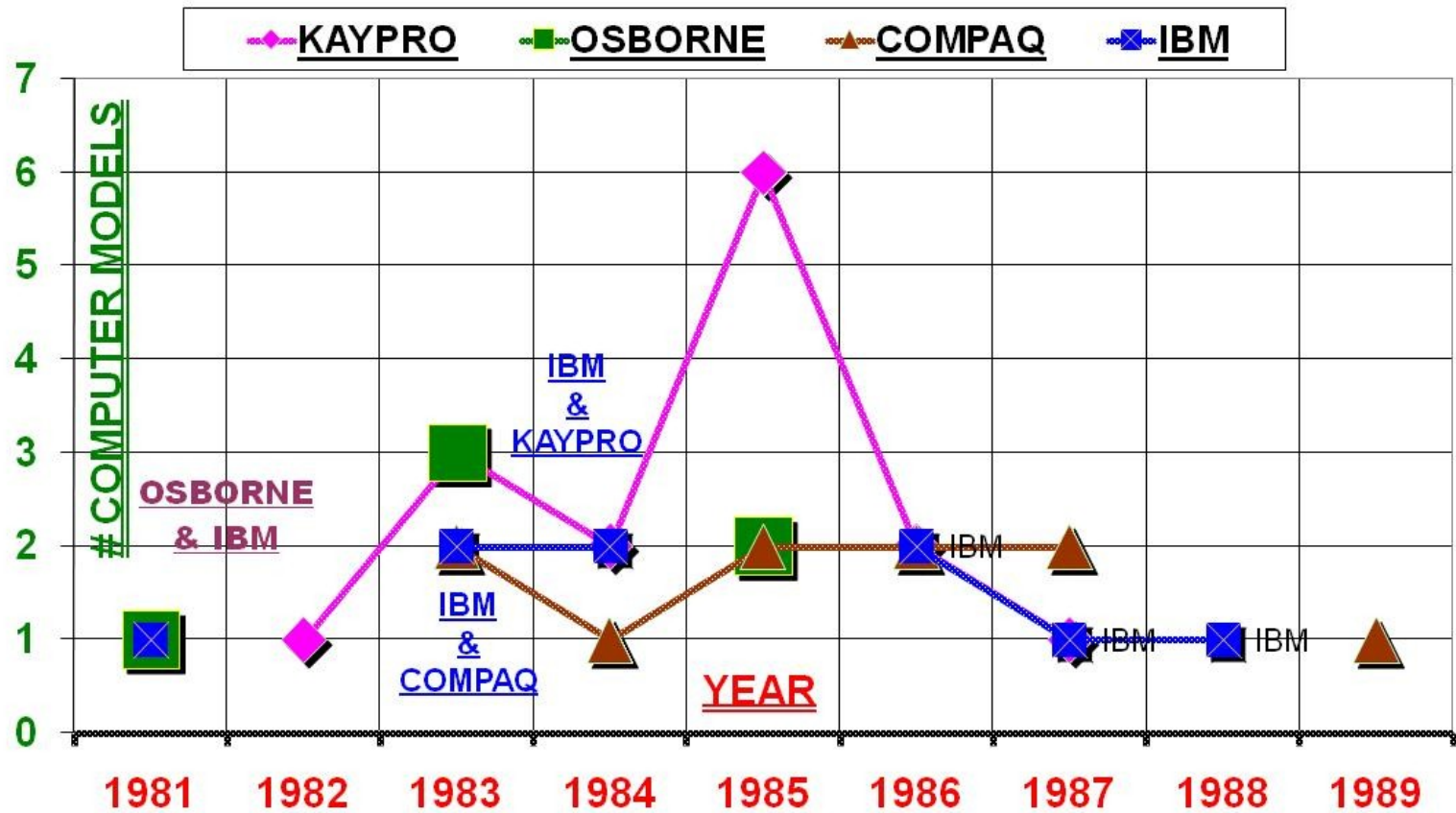


**SALES & LOSSES JUST OSBORNE & KAYPRO PPC
COMPANIES 1980'S [NOT COMPAQ - HAD NO LOSSES]**



	A	B	C	D	E	F	G	H	I	J	K	L
1	PLOT # COMPUTER MODELS PRODUCED EACH YEAR											
2		BY 4 MAIN PPC COMPUTER COMPANIES EARLY 1980'S										
3		F. GADEK, COPYRIGHT 03/17/2008										
4	YEAR		1981	1982	1983	1984	1985	1986	1987	1988	1989	TOTAL
5	COMPANY	FOUNDED										
6	OSBORNE	1980	1		3		2					6
7	KAYPRO	1981		1	3	2	6	2	1			15
8	COMPAQ	1982			2	1	2	2	2		1	10
9	IBM	1889	1		2	2		2	1	1		9
10												
11	NOTE -	1982 KAYPRO I WAS ONLY A DEMONSTRATION MODEL										
12												
13												

4 MAIN PPC PLAYERS - # COMPUTER MODELS PRODUCED



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	SUMMARY OSBORNE, KAYPRO, COMPAQ & IBM COMPUTERS EARLY 1980'S														
2			F. GADEK COPYRIGHT 03/17/2008												
3					TOTAL	# COMP -								ONLY	
4		YEARS			# COMP -	TERS			# DESK-	# LAP-			ONLY	MS-	
5	COMPANY	FROM	TO	#	TERS	/YEAR	# PPC'S	%	TOPS	%	TOPS	%	CP/M	DOS	% CP/M
6	OSBORNE	1981	1985	5	6	1.2	6	100					2	2	33
7	KAYPRO	1982	1987	6	15	2.5	10	67	4	27	1	7	9	5	60
8	COMPAQ	1983	1989	6	10	1.7	6	60	4	40				10	0
9	IBM	1981	1988	7	9	1.3	2	22	6	67	1	11		9	0
10															
11		NOTE - FIRST IBM WAS BOTH CP/M AND MS-DOS													
12		KAYPRO 4+88 WAS ALSO BOTH													
13															
14		YEARS WITH LARGEST # COMPUTERS OFFERED													
15		OVER <u>5 YEARS</u> - OSBORNE 3 OF 6 COMPUTERS IN 1983 = 50 %													
16		OVER <u>6 YEARS</u> - KAYPRO 6 OF 15 COMPUTERS IN 1985 - 40 %													
17		OVER <u>6 YEARS</u> - COMPAQ ONLY 2 IN EACH YEAR 1983, 1985,													
18		1986 & 1987, SO 2 OF 9 = 22 %													
19		OVER <u>6 YEARS</u> - IBM ONLY 2 OF 7 COMPUTERS IN 1983 & 1986													
20		SO 2 OF 7 = 29 %													
21															
22		ONLY INFORMATION COULD FIND ON DISCONTINUING MODELS -													
23		IBM PC 5150 ONLY LASTED <u>7 YEARS</u>													
24		IBM PCjr 4860 ONLY LASTED <u>3 YEARS</u>													
25															
26															

SO “MY TAKE” ON OSBORNE & KAYPRO
ARE AS FOLLOWS FROM THE DATA I FOUND

OSBORNE

“THINGS JUST MOVED TOO FAST!”

THERE WAS LITTLE TIME TO
ADEQUATELY ADJUST

THEY ONLY LASTED LESS THAN 3 YEARS
IN A FAST MOVING INDUSTRY, HOW DO
YOU EVEN DETECT CHANGES,
SINCE YOU ARE SO BUSY
MANAGING SUCH A SUCCESSFUL
BUSINESS?

**EVEN IF YOU DETECT THE CHANGE, HOW
DO YOU ANALYZE IT & DEVELOP
AN APPROPRIATE **ACTION PLAN** FAST
ENOUGH, BESIDES PROPERLY
IMPLEMENTING IT FAST ENOUGH?**

**ADAM OSBORNE KNEW HE NEEDED A
PROFESSIONAL & EXPERIENCED
MANAGER – HE KNEW HE WAS
NOT THAT PERSON**

**HE HAD DIFFICULTY ATTRACTING SUCH
PEOPLE TO SUCH A NEW & UNKNOWN
INDUSTRY**

**HE GOT THE BEST HE COULD UNDER THE
CIRCUMSTANCES**

**BUT HIS SELECTION PROVED VERY
CONTROVERSIAL**

**READ HIS BOOK ON “HYPERGROWTH”
FOR MORE SPECIFICS**

OSBORNE COMPANY DID COME OUT OF
BANKRUPTCY IN 2 YEARS [**1985**]
& HAD SOME NEW PRODUCTS,
BUT ITS TIME HAD PASSED

CERTAINLY DIRECT COMPETITION FROM
KAYPRO DID NOT HELP

BUT **COMPAQ** WAS WELL ON ITS WAY TO
CONTINUED FANTASTIC SUCCESS
BY **1985** – FAR OUTDISTANCING
BOTH OSBORNE & KAYPRO

**THERE WERE EVEN SOME INDICATIONS
THAT SOME THINGS AT OSBORNE MAY
HAVE BEEN IMPROVING IN THE LAST
FEW MONTHS IN 1983 BEFORE
BANKRUPTCY WAS FILED**

**PERHAPS, EVEN A FEW MORE MONTHS
MAY HAVE MADE A DIFFERENCE.**

**HOWEVER, EVEN IF IT DID, AGAIN, COMPAQ
WAS SO FAR AHEAD, OSBORNE WOULD
HAVE HAD AN INCREDIBLE CHALLENGE
TO EVEN JUST CONTINUE TO SURVIVE!**

KAYPRO

DATA INDICATE THAT IN 1985 KAYPRO
HAD SOME SERIOUS DIFFICULTIES
THEY DID SEEM TO START TO RECOVER
BUT IN 1989 THEY LOST ALMOST ALL
THEY EARNED [-89%]
THEY FILED FOR BANKRUPTCY THE NEXT
YEAR 1990 & DID NOT COME OUT OF IT
ASSETS WERE EVENTUALLY SOLD FOR
ABOUT \$0.10 ON THE DOLLAR – AS IN
MANY SUCH CASES.

THEY LASTED LONGER THAN OSBORNE
– 7 VERSUS 3 YEARS – SO THEY HAD
MORE TIME TO TRY TO ADJUST
HOWEVER, THEY MAY HAVE TRIED
TOO HARD!’

IN 1986, RECOVERING FROM 1985, THEY
INTRODUCED AN ASTOUNDING “6”
NEW COMPUTERS IN JUST 1 YEAR!
3 OTHER COMPANIES INTRODUCED 1- 3 / YEAR
THEIR OVERALL INTRODUCTION OF NEW
COMPUTERS WAS THE HIGHEST OF
ALL 4 COMPANIES – 2.5 / YEAR
VERSUS 1.2 TO 1.7 / YEAR

**BESIDES DEVELOPMENT & MANUFACTURING COSTS INVOLVED
WITH SO MANY COMPUTER MODELS,
PAST & PRESENT, SUPPORT OF SUCH
A LARGE NUMBER OF COMPUTER
MODELS CAN ALSO BE A SUBSTANTIAL
CHALLENGE –**

**SPARE PARTS
INEVITABLE “BUGS” TO FIX
SHIPPING
MARKETING / SALES
ETC.**

THE DATA ALSO INDICATE THAT THEY CONTINUED TO BE HEAVILY DEPENDENT ON CP/M OPERATING SYSTEM COMPUTERS, EVEN THOUGH IBM COMPATIBLE COMPUTERS, NOT USING CP/M, BUT RATHER PC-DOS / MS-DOS OPERATING SYSTEMS WERE CLEARLY PREFERRED BY CUSTOMERS

60% OF ALL KAYPRO COMPUTERS WERE CP/M BASED – INCREDIBLY SUCCESSFUL COMPAQ HAD NO CP/M BASED COMPUTERS

**EVEN IN 1986 KAYPRO STILL OFFERED
A “NEW” [?] CP/M BASED COMPUTER**

**MAYBE THIS WAS JUST TO USE UP
SPARE CP/M COMPUTER PARTS &
INCREASE “CASH FLOW”**

**OSBORNE MAY HAVE ALSO BEEN TRYING
TO DO THIS JUST BEFORE FILING FOR
BANKRUPTCY**

**KAYPRO DID BEGIN TO MAKE IBM
COMPATIBLE COMPUTERS AFTER
A SLOW START – NOTE THAT THIS CAN
BE JUST MONTHS NOT YEARS IN SUCH
A FAST PACED INDUSTRY!**

**DAVID KAY MAINTAINES THEY WERE
THE ONLY COMPANY TO SUCCESSFULLY
MAKE THIS TRANSITION – THE OTHER
COMPANIES WENT BANKRUPT**

OVERALL KAYPRO –

**WAS SLOW TO OFFER IBM COMPATIBLE
COMPUTERS**

STAYED WITH CP/M COMPUTERS TOO LONG

MADE TOO MANY DIFFERENT COMPUTER

MODELS TOO FAST

HAD SOME SERIOUS MANAGEMENT ISSUES

ADJUSTING TO THE NEW

“HYPERGROWTH” DEMANDS

OF THIS NEW INDUSTRY

**COMPAQ JUST GOT TOO FAR AHEAD TOO
FAST!**

NOTE – ON BALANCE

THE CP/M ISSUE IS COMPLEX

**IT WAS WELL KNOWN, ESTABLISHED,
TESTED & WIDELY USED**

MS-DOS / PC-DOS WAS NOT

**IT WAS NEW – UNTESTED – BY A NEW
COMER TO COMPUTING – BILL GATES!**

**THIS IS A GOOD AREA FOR FURTHER
EXPLORATION**

COMPAQ SUCCESS

NOT MUCH WAS FOUND SPECIFICALLY

**OBVIOUSLY, DECIDING TO GO WITH IBM
COMPATIBLE & NOT CP/M WAS
A MAJOR FACTOR**

**LEARNED FROM OSBORNE & KAYPRO
EARLY MISTAKES**

ON A MORE PERSONAL NOTE –

LONG TIME LOYAL KAYPRO USERS
WERE IN A “STATE OF SHOCK” THAT
THEIR TRUSTED KAYPROS WERE
NOW **NOT SUPPORTED** BY KAYPRO
SINCE THEY WERE OUT OF BUSINESS

HOW TO MANAGE?

**THIS IS DELINEATED IN THE FULL PAPER,
ALONG WITH “SOME LESSONS LEARNED”
FOR MANAGING OUR COMPUTER SYSTEMS
TODAY**

**AS ALAN KAY [NOT ANDY KAY OF KAYPRO]
SAID SO EARLY IN THE COMPUTER ERA,**

**“THE BEST WAY TO PREDICT THE
FUTURE IS TO INVENT IT!”**

THANKS FOR READING !

HOPE IT WAS OF SOME
INTEREST & USE

LOT MORE RESEARCH YOU
CAN DO IF INTERESTED.

AS WE SEE EVEN IN 2013
LOT OF THE SAME " PATTERNS"
BEING CONTINUALLY FOLLOWED
EVEN THOUGH PROVEN LONG AGO
THEY DO NOT WORK !